most invariably no unpleasant effect follows.

Next to the danger of doing anything of this kind, that from hæmorrhage has been the greatest in common estimation. But even this has been greatly overestimated. Most of the blood comes from the vessels of the pia rather than from the brain matter proper. The picture of a traumatic apoplexy may be most unpleasant, but is a most improbable one. In the use of the temporary tampon we possess an effectual method of combating this. And if it is the vessels of the pia which particularly give trouble, they may be lifted up from their resting places and secured, or one may follow the suggestions of Fluhrer or Nancrede and leave one or more small *serres-fines* in place for a day or two. We must only remember that the cerebral arteries are all terminal.

It has been shown that the brain resembles the kidney in this respect—*i. e.*, that its proper vessels are excentrically directed and run almost perpendicularly to its surface; consequently, if an incision be made in this same relative direction, but few of these will be wounded. It has also been shown that, while oozing from such a wound may be for the moment rather free, it will readily subside after the insertion for a moment of a tampon or sponge.

The danger of hæmorrhage, primary and secondary, will be alluded to again further along.

With regard to brain abscess consequent upon middle-ear disease we have only to add some suggestions as to the best points at which to trephine. According to Bergmann (*l. c.*, p. 801), the best position for application of the instrument is above and behind the ear. Draw a line from the lower border of the orbit to the middle of the external ear, and continue it backward. Four centimetres back from the external auditory meatus erect a perpendicular to this line, and at a point four to five centimetres above the first, on this second line, the middle temporal lobe will be reached, without danger of injuring the posterior branch of the middle meningeal artery—a danger nearly unavoidable if the trephine be applied just above or a little in front of the ear. MacEwan has proposed to make the first perforation through the squamous bone six centimetres above the ear, and then to follow with a second counter-opening on a level with the floor of the abscess, wherever this may be. Numerous cases are on record where death has resulted from failure to make this second opening (Nancrede), although Bergmann considers such through drainage inadvisable, holding that a single opening is sufficient if drainage is favored by position; irrigation, even, in his opinion, being at times injurious.

If abscess in the cerebellum is suspected, important information may be gathered by an incision from the mastoid foramen to the mastoid-occipital fissure. If pus appears here, along the vein or under the periosteum, then it is probable that it has worked its way into the posterior fossæ of the skull and determined an abscess in its contents. For, as Mr. Barker says ("British Medical Journal," December 11, 1886, p. 1155), "if there be inflammation in the posterior aspect of the petrous bone, it can hardly reach the cerebellum without forming a layer of pus under the dura mater of the lateral sinus." Any extensive operative procedure upon the cerebellum means attacking it below the tentorium. An aspirator needle might be passed into the cerrebellum through this membrane from above, but any tumor or abscess which it is proposed to radically attack must be reached from below the tentorium. (*Vide* the remarks above on *Topographical Anatomy.*)—N. Y. *Med. Journal.*

(*To be continued.*)

SPONTANEOUS BACTERIOTHERAPY.

The occasional cure of a local affection by an attack of erysipelas is a matter of common observation, and the occurrence is not necessarily to be explained as the triumph of one micro-organism over another. In a recent number of the "Gironale internazionale delle scienze mediche," however, Dr. de Biase gives examples in which erysipelas was followed by the subsidence of a systemic disease. He reports three cases of malarial disease that were perfectly cured by an attack of facial erysipelas. Not only did the febrile paroxysms cease, but the phenomena of chronic malarial poisoning disappeared rapidly "after the erysipelas cocci had got the better of the malarial micro-organism."

Rhus poisoning is said to yield quickly to the local application of fluid extract of Grindelia robusta.